

Transcript of the "Wenden bitte!" podcast:

Episode 20: How can the sustainability transformation work?

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Introducing the subject and today's contributors

Nadine Kreutzer:

Hello and a warm welcome to "Wenden bitte!". Today, we're recording the 20th episode of our podcast. The time really has flown by. I'm Nadine Kreutzer and as always, I'm here with Mandy Schossig from the Oeko-Institut. Mandy, you're responsible for Public Relations and Communication and you're back from a well-deserved break with your batteries fully recharged.

We've chosen an ambitious and wide-ranging topic this time and we are looking forward very much to the discussion.

Mandy Schossig:

Yes, a warm welcome from me, back with recharged batteries. And you're right, that's what we'll need because this really is a big issue. Our topic for today is nothing less than the sustainability transformation as a whole – because transformation stands above all the "transitions" that we have been discussing here in the podcast.

Nadine Kreutzer:

And the question is: how can the sustainability transformation work? Let's find out from the man in charge.

Mandy Schossig:

Exactly! I thought that to mark the occasion, I would invite our CEO Jan Peter Schemmel to join us. Jan Peter has been working on the topics of climate, environment and energy for a good many years in a variety of roles, including at the German development agency GIZ, where he was involved in sustainable development consultancy for a range of stakeholders in emerging economies. He has been the Oeko-Institut's CEO since 2019, which of course makes him the ideal person to talk about this all-encompassing topic. Hello, Jan Peter, it's good to see you.

Jan Peter Schemmel:

Hello! Thank you for inviting me.

Nadine Kreutzer:

Yes, it's great to have you here with us in the studio. Mandy has already outlined some of your very wide-ranging experience. Thinking back, is there one specific event that stands out for you as a milestone on the path towards sustainability?

Jan Peter Schemmel:

Yes, a minor milestone – a small green shoot, I would say, but I found it very inspiring at the time. That was before I began my studies. In 1992, the Netherlands entered into bilateral agreements on sustainability with three countries – Bhutan, Costa Rica and Benin. These were the Sustainable Development Agreements (SDAs). Their novel feature was that among other things, they expressed a commitment to various principles and one of them was to provide mutual support in order to achieve sustainability.

And what I find so exciting is that it implies that the so-called Global North is not on a sustainable pathway and may need some support. This was a very unusual initiative at the time. The form subsequently adopted for the <u>Sustainable Development Goals</u> in 2015 was that all countries must transform in order to achieve sustainability. At the time, I had done a work placement with the non-government organisation that managed the agreement in Costa Rica. And they commented on and criticised the expansion of Schiphol Airport in Amsterdam, for example – something that is not normally done, out of consideration for the other country's sovereignty.

Although this is something that many people are unwilling to recognise even today, it clearly shows that we are all in the same boat and must transform together, and any ideas and support are helpful. We're not quite there yet in Germany, that we could envisage learning anything from the poorer countries, although that is certainly the case.

Mandy Schossig:

I think we'll come back to that later – who is involved, and what kind of role or game are they playing? But before we look at the issues in detail, let's hear more about today's topic.

Sound clip (brief subject overview)

The ice is melting, rivers are drying up, cities are flooding, heatwaves are claiming human lives, and species are becoming extinct. The impacts of the climate crisis can already be felt today and according to the IPCC report, the irreversible tipping points could well be reached much earlier than previously assumed unless prompt action is taken to reduce emissions, conserve resources and protect habitats. It is clear that we cannot progress with a "business as usual" approach. We need a shift towards sustainability – and that means transforming the way we live and run our economy. It means restructuring our energy system and progressing the mobility transition, resource conservation and a circular rather than a linear economy. However, the transitions that are needed are beset with challenges. How do we respond when existing jobs fall away and new ones emerge? How can we ensure that the transformation is socially just? How can we win over those who believe that the transformation imposes unacceptable burdens, even though the burden will be even heavier for all of us and our children if no action is taken? And how can we ensure that the necessary change is initiated and taken forward with the requisite speed worldwide?

Protecting the environment and climate: the status quo

Mandy Schossig:

It's still a work in progress in many areas. So let's jump right in. Jan Peter, you have a great deal of experience in the whole sustainability debate. If we step back for a moment and look at the current situation, where do we stand on global action to protect the climate and the environment, from your perspective?

Jan Peter Schemmel:

When it comes to protecting the climate, we are aware of the importance and the urgency – so that's a positive. And with the Paris Agreement, we have specific, globally agreed targets, as well as mechanisms that enable the global community to make progress. That's another positive. So

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we are on the right track overall. But we are still moving far too slowly. Fortunately, we have at least picked up the pace slightly in recent years if we look at the situation from a global perspective.

As for the other environmental problems apart from the climate, the situation is less positive, sadly. The second major crisis is the biodiversity crisis, the rapid loss of species, ecosystems and genetic diversity. Here, we have depredation of our vital natural resources at present and I think we are still underestimating this both in the economy and within society here in Germany and worldwide. In terms of recognising the problem, the urgency and our commitment to take action, we are still trailing years behind climate change mitigation. But then again, at least we can learn from the action we are taking on the climate. Take the way in which agreements are made: the biodiversity community is replicating much of this, but we are moving far too slowly here. It is a similar situation with the crossing of planetary boundaries, nitrogen and phosphate use, and marine conservation.

Climate action from a national perspective

Nadine Kreutzer:

If we focus on Germany, you said that in many areas, we know what needs to be done. And yet we are moving at snail's pace. Why is there no progress? Based on your experience in recent years, you have done all kinds of things and you have talked about the agreement which inspired you early on. You've been observing the situation for years – so why are we not moving forward, for goodness' sake?

Jan Peter Schemmel:

Well, for one thing, there are various stages and steps to pass through before a transformation can get started. First, we have to recognise that there is a problem, that we ourselves are part of the problem, that we have a role in and responsibility for solving the problem, and once we have all that, we have to agree goals and mechanisms to progress the necessary changes.

With climate change, we have already passed through these stages, but it is a long process. Let's say the starting point was the first report of the Intergovernmental Panel on Climate Change – the IPCC – which was submitted in 1990. The negotiations on the adoption of the United Nations Framework Convention on Climate Change began the same year; all these Kyoto Protocols and Paris Agreements and so on were subsequently developed in that context. That was back in 1990; it's now 2023, which means that we have been working on this for 33 years – longer than the time we have left to achieve a climate-neutral world.

This shows that it takes time to work through these steps. And that's understandable, because by doing so, we acknowledge that what we were doing previously was not sustainable. This was partly due to a lack of knowledge. But this knowledge has been generated over time. So every individual, every society must accept responsibility and be willing to take action. At the same time, we know that this will incur very high costs and perhaps lead to major changes which we are probably a little fearful of as well. A great deal of courage is also required, and political systems don't always make it easy for decision-makers to show courage and lead by example.

Nadine Kreutzer:

And if we look at what's happening in the media, there are phases when climate change mitigation is on the front pages, but then a crisis comes along – COVID, for example – and it slips into the background and it's a struggle to bring it back into the public consciousness. Or how do you see this?

Jan Peter Schemmel:

Yes, although I think that now, with the climate crisis recently, we have seen some progress and it is no longer slipping into the background to the same extent. If we look at other crises – such as the financial crisis from 2008 to 2011 – countries' responses were less robust where climate change mitigation was concerned. I'm thinking of the integration of climate action as a potential mobilising factor for capital, as possibly offering potential for investment, or its potential for economic development. It was a very different situation with the economic stimulus packages during the COVID crisis, for example – many more countries addressed the climate issue and integrated it far more pro-actively, including Germany, where it was integrated more strongly as well.

With the Ukraine war, too, no one said that it was time for us to put climate action on the backburner. Instead, renewable energy was hailed as "freedom energy" because the connection was recognised – renewables can help to strengthen sovereignty and energy independence. We are now at the point where the climate issue – even if it's not in the newspapers every day – continues to be raised. So it is on our radar and we no longer have this constant dilemma; on the contrary, we recognise the opportunities and the potential for climate action to help solve the crisis or mitigate its impacts.

Key levers for a successful transformation

Mandy Schossig:

You said this is already being addressed. But obviously it is not progressing fast enough in some areas. What are the most urgent aspects where this needs to happen now?

Jan Peter Schemmel:

On the whole, we know which solutions we need. I'll run through nine of them – briefly, to avoid boring our listeners – but they are all relatively clear.

First, we need to exit from fossil fuels. We are already doing this, but of course, for many other countries, and indeed for us as well, it requires tremendous effort and we need to rapidly expand our renewables, mainly wind and solar. Second, we need to carry out more green energy upgrading of buildings and electrify the buildings sector. Third, in mobility, we need a stronger shift away from individual motor transport to public transport and rail, and again, we need to electrify the transport sector as a whole. Fourth, we must leverage the potential for energy and resource efficiency. Fifth, we must establish a green hydrogen supply for particularly energy-intensive industries where no alternatives exist. Sixth, we must move from linear to circular business models and transition to a genuine circular economy. Seventh, we must reorient our agriculture and food system away from meat production and consumption towards other foods. Eighth, we must ensure

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that forests and soil capture and store more carbon and that forests are restructured to increase their resilience to climate change.

And as the ninth point – and this is something people would prefer to forget about – we need less material consumption and more quality of life and sufficiency. This means making do with what we can accept as adequate and not constantly thinking about acquiring more.

Nadine Kreutzer:

That sounds like a good wish list.

Mandy Schossig:

You really have laid out the whole package. So a wide range of stakeholders will have to take action – phasing out fossil fuels, phasing in renewables; buildings; mobility, and so on. How do we put all these stakeholders on the path towards change? To start with, who has the most leverage here?

The various stakeholders' roles

Jan Peter Schemmel:

The wish list is a long one, granted, but that also shows that transformation is a big issue. If only one of the topics were involved, it wouldn't be a transformation. The defining characteristic of the transformation is that it entails radical change in all aspects of the economy and society. That's the only way we'll achieve climate neutrality and sustainability.

If we look at which stakeholders are involved, it varies slightly from sector to sector, in fact. Clearly, policy-makers have a key role to play in setting the framework so that other stakeholders are incentivised to adopt the behaviours we need to protect the climate. But it is also clear that policy-makers are dependent on the other stakeholders. We live in a democracy, so the link between politics and the public or business cannot be broken completely.

And that also means that these stakeholders have a responsibility to take action themselves; they can't simply pass the buck to politicians. As part of the body politic, the public can't say, "That's not acceptable. I'm not going along with that. I won't support the politicians if they go ahead with that," while also claiming in their economic role as consumers, "I wish I could but if it is not cost-effective to buy a more climate-friendly product, I won't be doing that either."

Nadine Kreutzer:

How can this resistance be overcome? If we have so many different individual interests at play, how do we get people round the table? Is there a strategy?

Jan Peter Schemmel:

There's no "one size fits all" solution, that's for sure. Policy-makers have an important role to play by providing clarity on the direction of travel, by making clear that we want to move towards climate neutrality – we have that in the climate targets. And where this clarity exists, policy-makers must

map out firm technology pathways and ensure that developed, market-ready technology can be ramped up quickly for market launch.

The fact is that right now, we don't have time to wait for another three or four new inventions that are nowhere near market-ready. When technology is market-ready, policy-makers' role is to support market rollout by ensuring that the infrastructure is in place and there is clarity on the direction of travel, as well as a stable environment for investment.

The transformation creates quite enough uncertainty as it is, and if policy-makers fail to provide certainty wherever they can, our overall progress will be far too slow.

Nadine Kreutzer:

Stability for forward planning is important, then.

Jan Peter Schemmel:

Absolutely right.

Mandy Schossig:

If everything is interlinked, isn't there also a risk of failure? If one stakeholder drops out, we all fail, surely?

Jan Peter Schemmel:

If one drops out, that doesn't mean we all fail. But if consideration is always shown in each and every case, we won't move forward. That's nothing new; we are familiar with the old Nimby phenomenon – Not in my Backyard. During the infrastructural expansion for the energy transition, for example, the question of where to locate wind farms and lay power lines will also play a major role. It was ever thus, but if consideration is shown in every individual case, if we say, "OK, not in your backyard, it will have to be in someone else's – oh, wait, they don't want it either, so let's forget it," of course we won't move forward.

At the same time, it's not acceptable to simply impose it on people. We have to ensure that we initiate consultation processes early and take them seriously. There is positive experience here – if we start the participatory processes with serious intentions very early on, we can take the public with us. The other point is to give more thought to compensation mechanisms so that those who suffer disadvantage can still share the benefits of this technology.

Social aspects of the transformation

Mandy Schossig:

We often also hear the argument that there is not enough mitigation of the social impacts of the energy transition. This argument is often presented in order to put the brakes on the transformation. Then again, this doesn't mean the poorest members of society, who might genuinely need support, but middle-income groups that could probably cover certain investment costs themselves. How do you see this field of tension? What are the key points, in your view?

Jan Peter Schemmel:

For one, it is true that the poorest groups might be less impacted by climate change mitigation measures to some extent. The two poorest income deciles have far fewer cars per household than the higher income deciles, for example. This means that if we introduce measures that increase the costs for motorists, they won't affect these groups at all. It is exactly the same with holiday flights, which may well be far less affordable for these groups than for people in the middle or higher income deciles.

At the same time, the poorest groups often suffer the negative impacts of climate-damaging behaviours to a greater extent as well. For example, they are more likely to live near busy roads, so they are more exposed to air pollution and noise. They have smaller apartments, are less likely to have a balcony or garden, and are reliant on public spaces which may well be crammed with cars belonging to the more affluent instead of being available as play areas and the like. So that is an issue: there is a lot of talk about low-income groups but it may not mean the poorest groups overall.

But people in the middle income deciles also have to contend with burdens that we should be taking seriously. Let's think for a moment about the buildings sector: there are people who have invested all their cash in buying a house so they have a home of their own, but that leaves them with no savings to cover other major investment costs. In such cases, suitable funding programmes are needed to provide generous support for these investments. In Germany, we can certainly do better here in terms of targeting this support, and we should try to reduce the extent to which we subsidise windfall effects for the higher income deciles that can afford to cover these investment costs themselves. That would also give us more financial scope to allocate funding to more households that genuinely need it.

Nadine Kreutzer:

Taking a broader view, all these changes that we need – they affect us all. Overall, isn't it asking a lot to turn this giant ship around?

Fears and resistance to transformation

Jan Peter Schemmel:

It certainly is asking a lot. But equally, we could argue that not turning it around is an even bigger ask. Not just for our own society, for people who are alive today and for the next generations, but also – and already – for populations in other countries.

The impacts of the climate crisis in other countries are much more severe than they are here. There is the increase in extreme weather events, devastating floods in Pakistan and droughts on a vast scale, but we are noticing it more in Germany as well, and this clearly shows that we have to weigh up one big ask against the other.

If we think ahead, based on the impacts of the climate crisis that we are already seeing here in Germany as well, it is clear that the big ask that lies ahead of us will be significantly reduced if we embrace the transformation, compared with the burden that we and subsequent generations will face if we don't take action.

Nadine Kreutzer:

So on the one hand, we have the big ask, and on the other, we have the fears about where we go from here. Should we be bringing children into the world? That's a question that is often asked, with some justification. How do we deal with these fears?

Jan Peter Schemmel:

Fears and resistance to transformations must be taken seriously. We have to look at whether there is any substance to them and where and how they can be addressed. Another important point, however, that if we want to generate the necessary motivation and mobilisation for this transformation, society and the business sector have to be involved. We have to move away from a debate that revolves around fear, crisis and risk and highlight the opportunities and potentialities that climate action affords. This is what differentiates the climate crisis from other crises where this positive option does not exist and where the sole focus is on ending the crisis.

In fact, climate change mitigation offers a positive future. It creates pressure for innovation and technology; it creates new jobs in new sectors; and it offers more quality of life by improving environmental quality. In that sense, it provides a whole array of benefits, including for health – healthier food, for example – which we can and should be foregrounding to a much greater extent in order to generate more positive identification with the topic, and also to break out of this negative discourse and improve motivation.

Mandy Schossig:

At the Oeko-Institut, much of our research focuses on real-world labs. This is a space where approaches can be trialled to see if a scenario is perhaps less critical than might be assumed, because there are other options available. Could you tell us about these real-world labs – what are they, and which opportunities do they offer for the transformation?

Jan Peter Schemmel:

Broadly speaking, I would say that there are two different types of real-world lab. The type you mentioned tends to operate in a small-scale format where new approaches can be tested on a pilot basis. The distinctive feature of a real-world lab is that with scientific support and a transdisciplinary approach – in other words, based on close cooperation between scientists and practitioners, stakeholders and the public – we think about how to solve a specific problem. Through this collaboration, various practical problem-solving options are developed, implemented and evaluated in parallel in order to determine whether they are likely to be successful, so that afterwards, we have an idea whether this is a good approach that is suitable for upscaling. The great advantage of this is that it offers a learning space where people can see what would happen if they did things differently. In my personal experience, a real-world lab may show that there is no need for major change and, indeed, that there are gains in terms of quality of life.

Nadine Kreutzer:

This is something that you're researching at the Oeko-Institut and it is important. Would you say that it is possible to manage without real-world labs?

Jan Peter Schemmel:

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Certainly not, particularly on a topic such as transformation, where they can provide experience, address people's fears and concerns and identify positive alternatives through a positive discourse. If we also manage to communicate successfully on a broad scale, it can be a very powerful tool. This was my experience in development cooperation as well, where pilots are used, although they are not called real-world labs. If this is underpinned by a good communication strategy, if people who have gained this experience are connected with their peers in other communities and form a network, this can genuinely have a positive impact at scale.

Nadine Kreutzer:

Let's stay with the different types of fear for a moment. In some parts of the world, people are feeling the effects of climate change far more acutely; many have existential fears that go beyond anxiety about the costs of home renovations. These are presumably the people the activists are thinking about when they glue themselves to the road in an effort to attract attention. Can these fears be compared at all?

Jan Peter Schemmel:

Both have to be taken seriously. Can they or should they be compared? I don't know. The point is that both sets of stakeholders must take the other's fears seriously. In the current debate, I sometimes get the impression that this doesn't always happen. Instead, we are engaged in an increasingly ideological, often populist and polarised debate in which a whole array of actors in politics and the media are not currently performing the role that they should be playing in order to build society's crisis management capacity.

If we take the other side's fears seriously and start engaging in a dialogue, we can move to a factual level and together, we can think about what might be viable pathways. I think we need a more objective debate, and for that, it is important to recognise the other person's fears and take them seriously. The point is that these are genuinely existential fears in every case.

For example, if someone is a homeowner with no savings, it's quite clear that they will be asking themselves how they will be able to afford the investment that will be required to make their home climate-neutral. At the same time, no one should use this as a reason to ideologise other people's fears and say that what they are doing is impossible, because there are cost implications for those people as well. The point is that any action that we fail to take now will have to be funded by those who come afterwards. And they will have much less time for this than we do, and they will also have much higher costs because we failed to act. They will have to cover the adaptation costs and pay for the negative impacts of the climate crisis.

Mandy Schossig:

Many people have been talking about fear of change. What do you think people would be willing to do to achieve more climate change mitigation?

Engaging in joint action

Jan Peter Schemmel:

I think many people are willing to do a lot. We saw this after the start of the Ukraine war. Would we get through the next winter? That was the worry. We saw people genuinely changing their behaviour and reducing their gas consumption. In my view, this could have been demanded and pursued far more pro-actively at the time. What we saw was restraint on the part of the politicians, and perhaps also a concern that the public wouldn't support this approach, but I think this is a sign that people do take action when they realise that a situation is critical.

And otherwise, what I am experiencing in this context is that many people are asking, "OK, so what should I do now – is vegan better than vegetarian?" or "How important is it to wear a T-shirt made from certified cotton? Or is that just a water issue?" This shows that there is a great deal of interest and considerable willingness.

For that, first of all, there needs to be plenty of information for people, for the public and consumers, so they know how and where to make the right decisions and what the benefits will be; and second, the frameworks need to be in place – I'm thinking about prices here – so that it is easier from a financial perspective to do whatever is better for the climate. Unsurprisingly, no one wants to have less than they had before or consume less than they did previously.

Most people are fearful of losing out and are worried about restrictions, and this brings us back to the subject of real-world labs. They show that it depends on the issue: in some cases, something might not necessarily be viewed as a restriction. I am thinking of the urban population, for example; many people living in cities don't necessarily see it as a restriction if they don't have a car because there is a good local public transport system. The mobility options are quite adequate; there's no need to look for a parking space, they don't have the hassle of car repairs, or carsharing may be an alternative. In other words, if there are other options and the price signals are right, there is considerable willingness to make that commitment.

Mandy Schossig:

We have talked a lot about other people, but you are here with us as CEO of the Oeko-Institut. What is our role as a scientific stakeholder, in your view?

Jan Peter Schemmel:

First and foremost, science is there to provide knowledge, to continuously review current knowledge. The great thing about the scientific system and science generally is that it always questions itself, it is repeatedly challenged, and so it evolves. On the issue of climate policy, science has two roles to play. For one, there is the science around climate change – how far it has advanced, and how the Earth system will respond. We need this as a framework to deduce how quickly we must make progress with climate change mitigation, and how intensively. The other aspect is that once we have this knowledge and have defined the goals on this basis, we have to look at how we put this into practice.

The Oeko-Institut is mainly involved in the latter; we look at which measures and policies we can apply, which specific climate targets they will likely enable us to achieve, and what the knock-on effects of these measures may be, including the social impacts, and we consider how to design the policies so that they can be implemented in a more socially just and equitable manner. And that's how we provide policy-makers and the public with tools and principles that they can use in

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weighing up what they find acceptable and want to take forward. The decision on what needs to be done must logically lie with politicians.

Digital and sustainable transformation

Nadine Kreutzer:

Right now, we're focusing on the sustainability transformation, but other major transformations are happening in parallel – the digital transformation, for example. Where do you see similarities or differences between these two major change processes?

Jan Peter Schemmel:

Their common feature is that both of them are transformations. In both cases, our society and economy will radically change. However, the discourse around them differs considerably, which is interesting. The debate about the digital transformation is clearly a positive discourse: it is a discourse about opportunities. The aspects foregrounded here are the economic development, prosperity, quality of life and more satisfaction of needs that can be achieved through a digital transformation, although there are admittedly some concerns about job losses.

In the climate debate, the transformation is still being discussed in overly negative terms. The opportunities are not recognised to an adequate extent, although in both cases, we are talking about a wealth of new technologies, innovations and new types of job. There is a difference between the transformations here.

Mandy Schossig:

I think it's quite exciting that you're saying that the opportunities are foregrounded. We have already talked about the various roles: we haven't mentioned science, policy-makers and NGOs specifically, but who might be able to drive this debate about opportunities more vigorously in the interests of sustainability?

Jan Peter Schemmel:

I think this is where the various stakeholders come in. The business sector, for one – over the last 10 years, business has developed a clearer position here; it recognises that climate change mitigation and climate neutrality are not something that we can work around. And if we want an economic future, we must be first, fastest and best when it comes to climate action. In the business sector, the majority of stakeholders are already engaged in a transformation process that moves them in the right direction and are increasingly calling for policy-makers to establish clearer and more robust frameworks that are conducive to climate action. If business pursues this as a debate about opportunities, this will colour society's view to some extent as well.

The other stakeholders with a responsibility here are the policy-makers who have to lead the way on this transformation, not in isolation from everyone else but with positive messages without promising the earth.

So there are two stakeholder groups that can clearly drive the process; another is applied science, by showing how measures adopted in the social and economic spheres can impact the environment.

Nadine Kreutzer:

To what extent can these two strands of the transformation – sustainability and digital – cross-fertilise each other or be mutually beneficial? Can the digital transformation generate significant momentum for the sustainability transformation?

Jan Peter Schemmel:

There is certainly potential for that. At present, however, there are few robust studies available; what we tend to have instead are rough impact assessments that present very positive narratives. If we look at the fine detail, it is often apparent that this potential cannot be utilised to the full. Let's not forget that the digital transformation requires additional energy and resources, as well as scarce raw materials that have to be extracted by the mining industry or are difficult to recycle and have a negative impact on the environmental footprint. Not many studies on net balancing exist at present, and it undoubtedly also depends on which topic area we are talking about.

In the digital transformation, much of it is about making life easier for consumers. There are rebound effects here; this means more negative impacts due to increased consumption because product performance has improved. But if we look at what is possible with digital technologies in the context of nature or forest conservation, the benefits may outweigh the disadvantages – satellite remote sensing makes it much easier to safeguard and quantify the preservation of woodland, forest conservation and carbon monitoring in forests, for example.

In that respect, it does vary according to the topic, so it is important to look at each individual case, but there is certainly potential, which may not necessarily be as easy to quantify with the kind of figures that some studies suggest.

Nadine Kreutzer:

You can also listen to our episode on digitalisation which we released a little while ago.

Climate change mitigation from an international perspective

Mandy Schossig:

So let's look through an international lens for a moment. The sustainability transformation is taking place simultaneously all over the world. What are the most pressing issues at the international level?

Jan Peter Schemmel:

One question of particular relevance is identifying which countries are setting themselves a climate neutrality target and for which year. At the global level, we need to be climate-neutral by 2050 to avoid exceeding the 1.5°C threshold. So the question which arises is what kind of target countries like China, India, Vietnam and Brazil will set themselves. Fortunately, in recent years, we have

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seen that with the mechanism established under the Paris Agreement, more and more countries are setting ambitious targets.

Granted, if we consider that in Germany, we have a climate neutrality target that must be met by 2045, while major developing countries and emerging economies are setting targets for 2060, that's only an extra 15 years. But compared to us, they are starting from a much lower level of development with smaller budgets and a lower savings rate to achieve this target. In that sense, what some of these countries are setting as targets demands respect. We can only hope that we provide them with good support so they make progress and reach their targets.

Mandy Schossig:

You have already mentioned some of the challenges. What are the challenges facing poorer countries, particularly in their transformation to climate neutrality and more sustainability?

Jan Peter Schemmel:

For one, it's about the exit from fossil fuels, just as it is here in Germany, but coal plays a much greater role in some cases. At the international level, there are the <u>Just Energy Transition</u> <u>Partnerships</u>, for example, where the G7 countries assist selected major coal-consuming countries with the coal phase-out and provide funding so that they can exit earlier. Here, we can build on a wealth of experience from the EU on this whole topic. But what about the mine workers? What about the many branches of the economy which are indirectly dependent on coal? These are often regions where an alternative form of economic development needs to be established.

The second major topic that often comes up is how to ramp up the renewables share in the grid while safeguarding network stability. This is a general structural problem facing all countries; we are much further forward here because we have a much higher renewables share. However, we can see that many countries have worries and concerns about whether they can make this work. We can provide these countries with good support in establishing grids and safeguarding network stability so that increased shares of power from renewables can be transported here as well.

The third point is that the poorer the country, the more it is confronted with the question of how to provide an energy supply for its population. Renewables and climate change mitigation offer a great opportunity here because they facilitate stand-alone solutions – such as solar power – to supply rural communities that cannot be connected to the grid because expanding the grid to these areas would be too costly. On the other hand, the challenge we face in green areas, in forest-rich countries, is that while forest conservation has a key role to play in climate change mitigation, many people are dependent on forests but are living with forest clearance and the conversion of forests into farmland.

But let's be under no illusion: the situation varies considerably, depending on the country. In some cases, it is the poorer individuals and households driving this process, but often, it is the agricultural industry, agro-industry, that is responsible for forest degradation on a wide scale.

Nadine Kreutzer:

You have talked about the Just Transition countries. Can you explain this concept and exactly what it means?

Jan Peter Schemmel:

In a narrower sense, it is the Just Energy Transition; in other words, equitable transformation in the energy sector, or a fair energy turnaround. Ultimately, the underlying question is this: how do we achieve a transformation of the energy system from a fossil fuel-based supply to renewables while mitigating and cushioning the social burdens and impacts and offering an economic alternative for all affected demographic groups?

Nadine Kreutzer:

And then various countries were selected – the Just Transition countries. What does it take to become a Just Transition country?

Jan Peter Schemmel:

There was an international meeting where countries that were in dialogue with the G7 were approached or approached the G7 themselves to look at whether cooperation might be feasible here. Specifically, they are South Africa, Indonesia, Vietnam and now also Senegal. India was also approached but they didn't want to participate via the Just Energy Transition Partnership format with the G7. There will certainly be other forms of cooperation here.

Mutual support at the global level

Mandy Schossig:

And when you say that we – meaning Germany and the EU – should be supporting these countries, what does that mean? What might it look like?

Jan Peter Schemmel:

There are various aspects to this. In many countries, there is a need for technical capacities and also a better understanding of which options exist at a technical level, in order to cover all the aspects that they need to deal with to achieve this Just Energy Transition. And that's not an easy task. The other issue is funding; after all, in Germany and Europe, the exit from coal has been quite costly in the regions concerned. Many countries don't have that kind of money. So it is not a fully replicable and transferable model – at least, not in this form.

At the same time, funds will be required to provide compensation – for older mine workers, for example – and also to support and nurture alternative economic development in these regions. In other words, it is about both technical and financial support.

Mandy Schossig:

The question that's going through my mind is this: which role can Germany actually play? In the past, we were often a frontrunner in climate action; keywords here are solar power and waste separation. But are we still the frontrunner that we once were? What can we pass on, and where can we provide support? What's your assessment?

Jan Peter Schemmel:

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A frontrunner role is not only about passing on knowledge; first and foremost, it's about being a role model. I've noticed this frequently when I've been abroad: partner countries look to Germany or Europe and say, "If they are taking climate change mitigation seriously, there must be something to it. It may even be important for competitiveness because Germany is an exporting country and a major industrial country so they can't afford to position themselves as tree-huggers and ecofanatics. There is bound to be a clear rationale behind this." And this works both ways: "If the Germans are no longer pressing ahead to any real extent, then I'm not going to be the one to risk it; let's see how they get on – we can always look at this again."

In other words, being a role model is one aspect, but we must also recognise that there are now other countries that are demonstrating how to act fast and have been doing so for some time; look at the increase in renewables capacity in Vietnam and China, for example – it is surging. In India, too, the expansion of solar power in recent years has happened on a scale which suggests that Germany can certainly no longer be regarded as a frontrunner.

The other point is how far we have come. In the 2010s, we really weren't moving so fast. At the European level, the European Green Deal has generated tremendous momentum and it is remarkable that the Commission's momentum in driving this agenda has been sustained despite coronavirus and the Ukraine war. There has been no slackening of the pace; if anything, the pace has increased and this is recognised at the international level. And it is good that we are moving at speed because other countries see climate change mitigation as a driver of the future-focused transformation of their own economies, not only for the sake of the climate but also for economic reasons.

If we look at the Inflation Reduction Act in the US, this is a very ambitious programme whose purpose is to promote renewable energies, electromobility and climate action. It will do much to spur the US economy in that direction and generate momentum. And look at China: many years ago, the Chinese decided that e-mobility was a technology and a pathway that they wanted to pursue, not only in the interests of climate change mitigation but also for economic and industrial policy reasons. They thus defined a global pathway, a technology pathway which countries like Germany that rely on exports in the automotive sector can comprehend.

Being a frontrunner is not only about being a role model; it is also about future-proofing our economy. And that message has increasingly hit home in Germany. But if we look at other countries and other blocs – China, the US – we see that it really is time we moved up a gear.

Mandy Schossig:

In other words, we can learn lessons as well.

Jan Peter Schemmel:

Of course.

Nadine Kreutzer:

If we look at partner countries with which we cooperate, the wealth creation and prosperity gains often accrue to us as an industrialised nation. How can we make it work so that this happens in the partner countries as well and they benefit at the local level?

Jan Peter Schemmel:

That is certainly a challenge where we need to do some weighing up. If we think about green hydrogen, for example, which we will need for our economy, we will not be able to manufacture 100% of it in Germany: we would need vast amounts of renewable energy for that. If we look at the current debate about the expansion of renewable energy capacity and the opposition that this sparks within society, it is clear that we are not reaching the scale required to cover all our green hydrogen needs, so we will have to import. And if we import, then of course the question which arises for the countries that produce green hydrogen is whether they might want to supply the next stage in the value chain as well.

So for that reason alone, we will have to enter into honest dialogue with these countries if we want the supply to increase at a sufficiently rapid pace, so that they have further prospects for development as well, because there will be a run on this resource, on green hydrogen, worldwide.

The second point is that if we consider the geopolitical dimensions, we should have an interest in other stages in the value chain being established in partner countries to some extent, because the advantage of green hydrogen is that countries other than the former fossil fuel suppliers come into play. This offers an opportunity for more equitable distribution of energy policy power around the globe, which I believe is an advantage in terms of security policy and geopolitics. The keyword here is diversification, with more energy sovereignty due to the range of options and the strengthening of governments in less rent-oriented economies.

Nadine Kreutzer:

Wow, we really have covered a lot of ground on aspects of the sustainability transformation. That brings us to our final question which, as we know, is the Chancellor question. How can the sustainability transformation work? If you were Chancellor, which aspects would you tackle first?

Outlook and conclusion

Jan Peter Schemmel:

Courage and confidence: that's what we need to make it work. The key phrase here is a more positive debate with a clear direction of travel. We don't have time for equivocation or for stalling or wavering on issues that are already clear by bandying about terms like technology openness. And there needs to be a fact-based debate and less polarisation, a coming together for a non-ideological discussion of what is feasible. If I were Chancellor, I would require all the ministers in the Cabinet and the parties represented, if they come out against a climate change mitigation measure, to put forward a realistic, science-based alternative at the same time, or an alternative design for the same measure with the same mitigation effect. That would put a stop to this ideological ping-pong and move us towards a fact-based debate.

Nadine Kreutzer:

That's a good tip. I hope that the real Chancellor was listening just now.

Mandy Schossig:

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Exactly. So at this point in the show, a big thank you from us for enabling us to step back a bit and gain a broad perspective. Despite its breadth, I think we still had quite a focused discussion.

Nadine Kreutzer:

Yes, we were very focused. Thank you for sharing your expertise and providing a bird's-eye view of the issue. Jan Peter Schemmel, the Oeko-Institut's CEO, was our guest here in the studio today. Many thanks!

Jan Peter Schemmel:

Thank you both.

Mandy Schossig:

Looking ahead, next time we will be focusing on the circular economy. At present, it tends to be discussed in terms of a closed-loop economic strategy, but a circular economy involves much more than waste management so we would like to look at it in detail. We will be sorting through some of the concepts and discussing what a circular world might look like – and what we need to do to achieve it.

Nadine Kreutzer:

As always, if you have any questions on the topic ahead of the broadcast, please send them to podcast@oeko.de. We are always pleased to receive a positive review on your favourite podcast app – it's just an option, no obligation. We hope you'll join us next time. Goodbye for now.

Mandy Schossig:

Goodbye.